In the Claims

- 1. 26. (Cancelled)
- 27. (Currently amended) A method of producing a recombinant virus-like particle <u>that targets specific</u> tissue in a target animal, the method comprising:
 - (a) providing a viral genome;
 - (b) isolating at least one viral coat protein sequences that encode for a capsid structure provide
 - (c) inserting at least one first exogenous sequence encoding a protein or peptide of interest into the coat protein sequences;
 - (d) inserting at least one second exogenous sequence encoding a <u>tissue</u>-targeting <u>protein</u> sequence into the coat protein sequences;
 - (e) cloning the viral coat protein sequences comprising the first and second exogenous sequences into an appropriate vector; and
 - (f) transforming <u>a yeast, bacterial or algae</u> an appropriate host <u>organism for expression of the recombinant virus-like particle.</u>
- 28. (Original) The method of claim 27, wherein the first exogenous sequence encodes a protein or peptide that is antigenic in an animal.
- 29. (Original) The method of claim 27, wherein the first exogenous sequence encodes a protein or peptide that is an allergen in an animal.
- 30. (Original) The method of claim 27, wherein more than one first exogenous sequences is inserted.
- 31. (Currently amended) The method of claim 27, wherein one or more of the second exogenous sequences has the function of targeting the emplex expressed recombinant virus-like particle to a specific location.
- 32. (Original) The method of claim 27, wherein more than one viral coat protein is isolated.
- (Currently amended) A recombinant virus-like particle produced by the method of claims 27, 28, 29, 30, 31 or 32.

- 34. (Currently amended) A genetic construct comprising <u>at least one nucleotide sequence encoding at</u> least one viral coat protein, <u>at least one first containing</u> exogenous sequence <u>encoding for an antigenic or allergenic protein for displaying on the viral coat protein at least one second exogenous sequence encoding a tissue-targeting protein for displaying on the viral coat protein displayed peptides or proteins.</u>
- 35. (Original) The construct of claim 34, wherein more than one viral coat protein has been modified to display foreign proteins or peptides.
- 36. (Original) The construct of claim 34, wherein more than one non-identical exogenous protein has been inserted.
- 37. (Original) The construct of claim 34, wherein the exogenous sequence is inserted into a region truncated to remove sequence unnecessary for virus-like particle self-assembly.
- 38. (Original) The genetic construct of claim 34, wherein the first exogenous sequence is antigenic in an animal.
- 39. (Original) The genetic construct of claim 34, wherein the first exogenous sequence is allergenic in an animal
- (Currently amended) A recombinant virus-like particle produced from the genetic construct of claims 34, 35, 36, 37, 38 or:[-]39.
- 41. (Withdrawn) A method of using the recombinant virus-like particle of claims 34-39 as a vaccine, comprising: (a) providing the recombinant virus-like particle; and (b) administering it to a subject.
- 42. (Withdrawn) The method of claim 41, further comprising: (a) infecting an organism with the recombinant virus-like particle of claim 40; and (b) orally feeding the whole biomass of the infected organism to human or non-human animals.
- 43. (Withdrawn) The method of claim 42, wherein the biomass is processed for uniform dosing.
- 44. (Withdrawn) The method of claims 41-43, wherein the biomass is freeze dried.

- 45. (Withdrawn) The method of claims 41-43, wherein the biomass is encapsulated.
- 46. (Withdrawn) The method of claims 41-46, wherein the vaccine is used as a treatment for allergy.
- 47. (Withdrawn) The method of claim 41, wherein the vaccine is administered by injection.
- 48. (Currently amended) A vaceine therapeutic tool comprising the recombinant virus-like particles expressed by the constructs of claims 34-39. wherein the particles are isolated.